



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,126	09/24/2003	Mark J. Pettay	PAT-008B	2530

29129 7590 12/09/2008

MICHELLE A. ZARINELLI
C/O WEST CORPORATION
11808 MIRACLE HILLS DR.
MAIL STOP: W11-LEGAL
OMAHA, NE 68154

EXAMINER

WOZNIAK, JAMES S

ART UNIT	PAPER NUMBER
----------	--------------

2626

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

12/09/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

MAZARINELLI@WEST.COM

Office Action Summary	Application No. 10/670,126	Applicant(s) PETTAY ET AL.
	Examiner JAMES S. WOZNAK	Art Unit 2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-69 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-69 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. In response to the office action from 6/3/2008, the applicant has submitted an amendment, filed 9/9/2008, amending independent claims 1, 11, 23, 44, and 68-69 to incorporate either panel-by-panel playback and confidence thresholds, a communication network, or library storage, while arguing to traverse the art rejection based on the amended limitations and the logic the examiner employed in setting forth the previous 35 U.S.C. 103(a) rejections (*Amendment, Pages 15-21*). Applicant's arguments have been fully considered, however the previous rejection is maintained due to the reasons listed below in the response to arguments.

2. With respect to amended claims 44 and 68-69, the examiner has withdrawn the previous 35 U.S.C. 112, second paragraph rejection.

Response to Arguments

3. Applicant's arguments have been fully considered but they are not persuasive for the following reasons:

In the Amendment filed on 9/9/2008, the applicants have set forth several arguments that allege that the various prior art combinations are improper (*Amendment, Pages 15-19*). The

examiner has fully reviewed these arguments and respectfully disagrees. The various aspects of these arguments and the examiner's reply to each will be set forth below.

On Page 15, the applicants first point to the example recitation involving Scarano et al (*U.S. Patent: 7,076,427*), Katz (*WO 94/21084*), and Macleod Beck et al (*U.S. Patent: 6,910,072*). In the prior Office Action (*from 6/3/2008*) it was said that Scarano, Katz, and Macleod Beck are “analogous art because they are form a similar field of endeavor in customer service analysis systems” (*Page 20*). The applicants disagree with this statement because they note that analogous art is defined as a similar problem to be solved not a modification of the prior art and point to various instances of case law in support of their position. In response, the examiner notes that MPEP 2141.01(a) states that “Under the correct analysis, any *need or problem known in the field of endeavor* at the time of the invention and addressed by the patent [or application at issue] can provide a reason for combining the elements in the manner claimed. *KSR International Co. v. Teleflex Inc.*, 550 U.S. ___, ___, 82 USPQ2d 1385, 1397 (2007). Thus a *reference in a field different from that of applicant’s endeavor may be reasonably pertinent if it is one which, because of the matter with which it deals, logically would have commended itself to an inventor’s attention in considering his or her invention as a whole.*” In the present case, Scarano, Katz, and Macleod Beck are all from the same field of endeavor in customer service analysis systems, as required by the MPEP. More specifically, Scarano specifically notes that the monitoring utilized in his invention comprises “script adherence” (*abstract*), which is a form of customer service agent analysis, Katz discloses surveillance of an operator required to provide information to a caller for later review (*Pages 8, 24, and 27-29*), which is a form of customer operator agent review/analysis, and Macleod Beck recites a system

Art Unit: 2626

directed to reviewing a sales agent's interactions (*Col. 29, Lines 26-46; and Col. 50, Lines 9-18*). The applicants' invention is likewise concerned with reviewing the interactions of a sales agent (*Specification, Page 2, Lines 1-7*). Thus, although not required to be in the same field of endeavor as per the above MPEP recitation, the aforementioned prior art are all from a similar field of endeavor in customer service agent analysis systems, and therefore are considered analogous prior art. Thus, this argument has been fully considered, but is not convincing.

The applicants next proceed to generally classify Walker et al (*U.S. Patent: 6,567,787*) as being directed to a device that picks up words, Brockman et al (*U.S. Patent: 5,826,240*) as a handheld manual data entry device, Scarano as a voice recognition device that does not perform script compliance, and Katz as a telecommunication employee monitoring system, and thus, alleges that the prior art is non-analogous. In response, the examiner first points out that Walker specifically deals with script compliance of an agent using a speech recognizer (*Col. 5, Line 46-Col. 6, Line 39; Col. 7, Lines 10-Col. 8, Line 15; and Col. 13, Lines 4-27*), Brockman deals with agent voice interaction evaluation and also incorporates a speech recognizer and pre-set scripts (*Col. 5, Lines 46-54; Col. 6, Lines 1-39; Col. 7, Lines 29-49; and Col. 8, Lines 8-28*), while the Katz and Scarano references were explained above. Thus, each reference deals with customer agent review/monitoring and are analogous art. The examiner further notes that motivation has been provided, derived from the references themselves, as to why one of ordinary skill in the art would combine this analogous art (*Prior Office Action, Pages 6-7; Pages 12-16; and Pages 19-21*). Therefore, since the prior art is analogous and motivation for the combination thereof is provided by the references themselves, these arguments have been fully considered, but are not convincing.

The applicants next argue that in rejection claim 11, Walker is directed to speaking into a POS machine, Brockman is directed to entering data into a handheld computer, and Rtischev et al (*U.S. Patent: 5,634,086*) is directed to a language course, thus they allege that there is no motivation or suggestion to make the proposed modification (*Amendment, Pages 16-17*). In response, the examiner notes that the applicants seem to be narrowly interpreting one aspect of each reference for use in their alleged classification, however as is noted above, Walker and Brockman are both directed to customer service agent analysis and incorporate speech recognition and pre-defined scripts. Also, Rtischev additionally teaches a system that evaluates an accuracy/compliance of what a user/trainee has said based on a script comparison (*Col. 3, Lines 11-21*), and thus, is reasonably pertinent to the field of endeavor. Also, motivation has been provided, derived from the references themselves for combining the teachings of the prior art of record (*Prior OA, Pages 7 and 13*). Thus, the applicants' allegation that these references are not analogous is not convincing.

The applicants' further argue that the examiner made conclusive statements regarding the claims such as Walker and Brockman being analogous art because they are from a similar field of endeavor in customer service analysis systems using speech recognition because Brockman does not use speech recognition analysis (*Amendment, Page 17*). In response, the examiner notes that Brockman explicitly recites the use of speech recognition ("*a voice-recognition unit*", *Col. 5, Lines 46-55*). Thus, this argument has been fully considered, but is not convincing. The applicants further argue that the examiner's reasoning that Brockman's time stamps that indicate an elapsed period of time for a particular step means that the examiner did not thoroughly read the applicants' invention because a particular step does not define a panel. In response, the

Art Unit: 2626

examiner notes that in the applicants' own specification, a panel is defined as a "portion of a script" (*Specification, Page 9*). In Brockman, the time-stamped steps likewise represent segmented portions of a complete agent-buyer interaction (Col. 7, Lines 29-49). Thus, although limitations from the specification are not read into the claims (See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993)), Brockman's time-stamped steps are nevertheless considered panels by *the applicants' own definition*. Thus, this particular argument has been fully considered, but is not convincing.

On Pages 17-18 of the amendment, the applicants argue that the examiner has only provided merely conclusive statements for motivation for combining the prior art of record, however, the previous Office Action consistently sets forth motivation statements which have been derived from the references themselves (*Prior Office Action, Pages 6-7; Pages 12-16; and Pages 19-21*).

On Page 18, the applicants again argue that Katz is non-analogous art because Katz does not teach an agent evaluation method. In response, the examiner notes that Scarano does provide a script evaluation means (*Prior OA, Pages 15-16*) and that Katz discloses that monitored information is utilized in a supervisory review (*Katz, Page 28*) (*i.e., an agent evaluation*). Thus, these arguments have been fully considered, but are not convincing.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning (*Amendment, Page 18*), it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge

Art Unit: 2626

gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

With respect to Claim 1, the applicants argue that the examiner has not considered the invention as a whole because the examiner has disregarded the per-panel processing by pointing to a "particular step" in Brockman, which disregards the definition in the specification (*Amendment, Pages 18-19*). In response, the examiner notes that this argument was addressed above, thus, refer to the corresponding reply. The applicants further argue that the examiner has methodically separated claim elements, given elements different meaning, and used non-analogous art to supply the missing portions (*Amendment, Page 19*). In response, the examiner notes that the previous Office Action merely set forth what the primary reference taught, what they didn't teach, why the secondary references were analogous art, and why one of ordinary skill in the art would combine the references. As explained above, the references are analogous and the motivation for combining them is derived from the prior art references themselves. Thus, this general allegation has been fully considered, but is not convincing.

The applicants further argue that the prior art of record fails to teach various added limitations (*Amendment, Pages 19-21*). Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. In regards to such general allegations, see the corresponding rejections set forth below.

Claim Objections

4. **Claims 1-43** are objected to because of the following informalities:

In claims 1 and 23, "the confidence level" should be changed to --confidence level-- in order to provide proper antecedent basis for this limitation in the claim.

Claim 12 is listed as being dependent upon itself, but it believed it should be dependent upon claim 1. The claim should be amended accordingly and will be interpreted as such for the application of the prior art of record.

The further dependent claims fail to overcome the aforementioned claim objections, and thus, are also objected to due to minor informalities by virtue of their dependency.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. **Claim 11** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 11, the phrase "any" renders the claim indefinite because the metes and bounds of the claimed invention is unclear since it is uncertain what is encompassed by "any voice communications supporting network". See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1-5, 8-10, 12-24, 28, 30-38, and 41-42** are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker et al (*U.S. Patent: 6,567,787*) in view of Brockman et al (*U.S. Patent: 5,826,240*).

With respect to **Claim 1**, Walker discloses:

Conducting at least one voice interaction between the at least one agent and the at least one client, wherein the at least one agent follows the at least one script via at least one of a plurality of panels (*recording a spoken interaction between a customer and a service agent, wherein the agent reads from a script to conduct the interaction, Col. 7, Lines 10-60; and evaluating an interaction for a plurality of voice message segments, Col. 5, Line 46- Col. 6, Line 39; and Fig. 6*);

Entering information by the at least one agent according to response obtained from the at least one client during the voice interaction (*agent enters prompt information into the system based on client response, Col. 11, Lines 7-44*);

Logging the voice interaction as a portion of a log record (*Col. 5, Line 46- Col. 6, Line 39; Col. 6, Lines 53-66; and recording an audio interaction, Col. 7, Lines 1-60*);

Based on the logging, evaluating the at least one voice interaction with at least one automatic speech recognition component adapted to analyze the at least one voice interaction (*interaction evaluation through speech recognition, Col. 7, Line 45- Col. 8, Line 15; and Col. 13, Lines 4-27*); and

Determining via the confidence level thresholds of the at least one automatic speech recognition component whether the at least one agent has adequately followed the at least one script by using the evaluated at least one voice interaction (*evaluating the interaction through speech recognition and determining if the script was followed according to various evaluation criteria, Col. 6, Lines 24-39; and Col. 7, Line 45- Col. 8, Line 15; and various speech recognition evaluation criteria decisions linked to the likelihood of speaking a word/phrase properly, Col. 6, Lines 24-39; Col. 7, Line 45- Col. 8, Line 15; Col. 10, Lines 15-23; and Col. 13, Lines 4-27*).

Walker does not specifically disclose assigning time displacement timestamps to a plurality of prompt message panels during a voice interaction or panel-by-panel playback, however, Brockman recites a means for recording time stamps in a transaction log during a seller-client interaction that indicate an elapsed time point of a particular step (*i.e., panel*) in an interaction (*i.e., time displacement*) as well as the duration of the interaction step (*Col. 7, Lines 29-49; Col. 6, Lines 1-8; speech recognition processing means, Col. 5, Lines 47-55; recorded voice interactions, Col. 8, Lines 8-28; and selective playback of certain time-stamped steps, Col. 7, Lines 29-49; and Col. 8, Lines 8-28*).

Walker and Brockman are analogous art because they are from a similar field of endeavor in customer service analysis systems using speech recognition. Thus, it would have been

Art Unit: 2626

obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Walker with the time stamps taught by Brockman in order to permit a manager to confirm with reasonable confidence that the seller is performing appropriate steps at specific times (*Brockman, Col. 7, Lines 35-39*).

With respect to **Claim 2**, Walker discloses the method wherein the live agent is a telemarketing agent (*Col. 5, lines 40-45*).

With respect to **Claim 3**, Walker discloses the method wherein the script includes an offer of goods (*figure 6 and Col. 11, lines 30-44*).

With respect to **Claim 4**, Walker discloses the method wherein said voice interaction is carried on a communications network (*Col. 3, Lines 40-56; and Col. 5, Lines 41-45*).

With respect to **Claim 5**, Walker discloses the method wherein said communications network is a publicly switched telephone network (*telephone line, Col. 3, line 52; and Col. 5, Lines 41-45*).

With respect to **Claim 8**, Walker discloses the method the voice interaction is a telephone call (*Col. 5, lines 40-45*).

With respect to **Claim 9**, Walker discloses the method wherein said live customer client initiates said telephone call (*telephone ordering, Col. 5, lines 40-45 with Col. 12, lines 63-65*).

With respect to **Claim 10**, Walker discloses the method wherein the telephone call is initiated by an entity other than the at least one client (*telemarketing, Col. 5, Lines 40-45*).

With respect **Claim 12**, Walker discloses the method further comprising the step of: performing an action based (*bonus earned*) upon a determination obtained from said evaluating step (*Col. 6, lines 24-39*).

With respect to **Claim 13**, Walker discloses the method but wherein performing an action comprises transmitting a signal (*audio signal transmitted*) to said live agent corresponding to said determination (*Col. 9, line 59 – Col. 10, line 5*).

With respect to **Claim 14**, Walker discloses:

Performing an action comprises transmitting a signal to a reviewing authority corresponding to said determination (*billing system in communication with an operator database, Col. 6, Lines 24-39*).

With respect to **Claim 15**, Walker recites:

Performing an action comprises causing an entry to be made in a script compliance incentive system (*operator database, Col. 5, Line 46- Col. 6, Line 39*).

With respect to **Claim 16**, Walker discloses the method comprising: reviewing the determination of whether the at least one agent has adequately followed the at least one script (*bonus based on script compliance percentage, Col. 6, lines 24-28*).

With respect to **Claim 17**, Walker discloses the method wherein the score (*percentage; Col. 6, lines 24-28*) is assigned by the automatic speech recognition component (*SCRAPI; Col. 8, lines 6-11*).

With respect to **Claim 18**, Walker discloses:

Evaluating a plurality of panels (*evaluating an interaction for a plurality of voice messages, Col. 5, Line 46- Col. 6, Line 39; and Fig. 6*).

With respect to **Claim 19**, Walker discloses:

Assigning a respective score to each one of the panels (*score associated with a recited voice message, Col. 6, Lines 24-39*).

With respect to **Claim 20**, Walker further discloses:

Comparing data representing an actual duration of at least one interaction, wherein the at least one agent reads at least one script to the at least one client, to data representing an expected duration parameter associated with the at least one interaction (*time period during which a message should be spoken by an agent, Col. 8, Line 63- Col. 9, Line 15*).

With respect to **Claims 21-22**, Walker further discloses:

Disposition at least one interaction, wherein the at least one agent reads at least one script to the at least one client, based at least in part on a comparison of data representing an actual duration of the at least one interaction to data representing an expected duration parameter associated with the at least one interaction (*determining if a displayed message is recited in a specific duration and if not providing a reprompt to an agent, Col. 8, Line 13- Col. 9, Line 35*).

Claim 23 contains subject matter similar to Claims 1 and 12, and thus, is rejected for the same reasons. Walker also discloses system implementation in a telemarketing environment (*Col. 5, Lines 41-45*).

With respect to **Claim 24**, Walker discloses:

The communication network comprises at least one long distance telephone network (*remote communication media comprising telephone line; and telemarketing, Col. 3, Lines 40-56; and Col. 5, Lines 41-45*).

Claim 28 contains subject matter similar to Claim 2, and thus, is rejected for the same reasons.

With respect to **Claim 30**, Walker further discloses:

Transmitting at least one signal to the at least one agent (*transmitting a message to an agent, Col. 13, Lines 4-27*).

Claim 31 contains subject matter similar to Claim 14, and thus, is rejected for the same reasons.

Claim 32 contains subject matter similar to Claim 15, and thus, is rejected for the same reasons.

With respect to **Claim 33**, Walker discloses:

Identifying at least one instance of non-compliance with the script, wherein the agent did not adequately follow the script during at least one interaction (*identifying incorrectly spoken messages, Col. 6, Lines 24-39; and Col. 13, Lines 11-27*).

With respect to **Claim 34**, Walker further discloses:

Obtaining a voice record of at least a portion of at least one voice interaction (*recorded speech from an agent, Col. 7, Lines 45-60*).

With respect to **Claim 35**, Walker further discloses:

Obtaining at least a portion of a voice record of at least a portion of a suggested interaction that is related to the at least one instance of non-compliance (*obtaining a prompt message for comparison with a voice interaction, Col. 7, Line 46- Col. 8, Line 15; and Col. 9, Lines 16-35*).

With respect to **Claim 36**, Walker further discloses:

Obtaining at least a portion of a pre-recorded voice record (*obtained voice is recorded prior to analysis, Col. 4, Lines 34-55; and Col. 7, Line 45- Col. 8, Line 15*).

With respect to **Claim 37**, Walker further discloses:

Art Unit: 2626

Recording at least a portion of a second interaction as the further voice record after identifying that at least one instance of non-compliance (*obtaining additional messages spoken incorrectly in determining an appropriate action, Col. 6, Lines 24-39*).

With respect to **Claim 38**, Walker further discloses:

Providing at least the portion of the voice record of the at least one voice interaction and the voice record of the suggested interaction to the agent (*differences between agent interaction and a suggested interaction, Col. 13, Lines 11-27*).

With respect to **Claim 41**, Walker further discloses:

Directing the agent to remedial materials related to improving performance of the agent (*directing an agent's attention to correct prompts/phrases/words that will improve performance, Col. 13, Lines 4-27; and Col. 16, Lines 29-33*).

With respect to **Claim 42**, Walker further discloses:

Providing the agent with data representing at least one aspect in which the agent's handling of at least one interaction was deficient (*Col. 13, Lines 4-27; and Col. 16, Lines 29-33*).

9. **Claims 6-7, 25-27, and 29** are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker et al in view of Brockman et al and further in view of Stuart et al (*U.S. Patent: 6,868,154*).

With respect to **Claim 6**, Walker in view of Brockman discloses the method/system for evaluating a voice interaction between a telemarketing agent and a customer, as applied to Claim

1. Walker in view of Brockman does not specifically suggest communication over the Internet,

Art Unit: 2626

however, Stuart recites communications between a calling party and a service agent, conducted over the Internet (*Col. 6, Lines 52-64*).

Walker, Brockman, and Stuart are analogous art because they are from a similar field of endeavor in customer service systems utilizing speech recognition. It would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Walker in view of Brockman with Internet-based customer communication scheme taught by Stuart in order to expand upon the available networks taught by Walker, thus providing an alternate and well-known means of connecting a calling party to an agent (*Stuart, Col. 6, Lines 43-64*).

With respect to **Claim 7**, Stuart further discloses wireless communication between a calling party and an agent (*Col. 6, Lines 52-64; and Col. 11, Lines 45-47*).

Claim 25 contains subject matter similar to Claim 6, and thus, is rejected for the same reasons.

With respect to **Claim 26**, Stuart further discloses workstations for a plurality of agents (*Col. 6, Line 52- Col. 7, Line 30*).

With respect to **Claim 27**, Stuart further discloses an agent input device for communicating over a telephone network and a workstation terminal (*Col. 6, Lines 52-64*).

With respect to **Claim 29**, Stuart further discloses a plurality of customer service agents (*Col. 6, Lines 43-64*).

10. **Claim 11** is rejected under 35 U.S.C. 103(a) as being unpatentable over Walker et al in view of Brockman et al and further in view of Rtischev et al (*U.S. Patent: 5,634,086*).

With respect to **Claim 11**, Walker in view of Brockman et al discloses the method/system for evaluating a voice interaction between an agent and a customer utilizing speech recognition, as applied to Claim 1. Walker further discloses providing a voice interaction script compliance module accessible via a user interface terminal and a communication network including a telephone or wireless network (*Col. 3, Lines 23-56; and Fig. 1*). Although Walker discloses comparison of a spoken input to a vocabulary containing words and phrases (*Col. 7, Line 66- Col. 8, Line 15*) and conversion of an input audio signal (*Col. 4, Lines 23-33*), Walker in view of Brockman et al does not explicitly teach the conversion of input speech into a digital signal comprising at least one spectral representation, however, Rtischev discloses such a conversion process:

Converting data representing the voice interaction into a digital signal comprising a spectral representation of the voice interaction (*Col. 1, Lines 44-54; Col. 4, Lines 51-58; and Col. 5, Lines 4-27*);

Comparing the digital signal to a reference standard comprising a known vocabulary (*Col. 5, Lines 4-27*); and

Matching the digital signal to words and phrases contained in the reference standard (*Col. 5, Line 4- Col. 6, Line 5*).

Walker, Brockman and Rtischev are analogous art because they are from a similar field of endeavor in recognizing speech corresponding to a script reading. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Walker in view of Brockman et al with the speech input conversion means taught by Rtischev

Art Unit: 2626

in order to provide pre-processing used to implement speech recognition in Walker (*Walker Col. 7, Line 66- Col. 8, Line 15*).

11. **Claims 39 and 43** are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker et al in view of Brockman et al and further in view of Blair (*U.S. Patent: 7,203,285*).

With respect to **Claim 39**, Walker in view of Brockman discloses the method/system for evaluating a voice interaction between an agent and a customer utilizing speech recognition, as applied to Claim 35. Walker in view of Brockman does not specifically suggest that given and suggested voice interactions are converted to a different format, however Blair discloses converting such voice interactions into a GUI screen format (*Col. 6, Lines 37-46; and Col. 12, Line 56- Col. 13, Line 12*).

Walker, Brockman, and Blair are analogous art because they are from a similar field of endeavor in customer/agent interaction utilizing speech recognition. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Walker in view of Brockman with the fault-finding GUI taught by Blair in order to better improve business processes, train agents, and identify problems (*Blair, Col. 3, Lines 31-35*).

With respect to **Claim 43**, Blair discloses the GUI as applied to Claim 39 and further notes that mistakes in a call flow are highlighted (*Col. 5, Lines 15-19*).

12. **Claim 40 is** rejected under 35 U.S.C. 103(a) as being unpatentable over Walker et al in view of Brockman et al and further in view of Macleod Beck et al (*U.S. Patent: 6,910,072*).

Art Unit: 2626

With respect to **Claim 40**, Walker in view of Brockman discloses the method/system for evaluating a voice interaction between an agent and a customer utilizing speech recognition, as applied to Claim 35. Walker in view of Brockman does not specifically suggest a means for notifying an agent of performance via e-mail, however Macleod Beck discloses a means for emailing performance review data to an agent (*Col. 29, Lines 26-46*).

Walker, Brockman, and Macleod Beck are analogous art because they are from a similar field of endeavor in customer service systems utilizing speech recognition. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Walker in view of Brockman with the email means taught by Macleod Beck in order to provide a means for directly providing an activity review that is only accessible by the intended agent (*Macleod Beck, Col. 29, Lines 26-46*).

13. **Claims 44-50, 52-54, 56-58, 62, 64, and 67-69** are rejected under 35 U.S.C. 103(a) as being unpatentable over Scarano et al (*U.S. Patent: 7,076,427*) in view of Katz (*WO 94/21084*) (*referenced in the parent application 09/785,048*).

With respect to **Claims 44 and 69**, Scarano discloses:

Identifying at least one interaction handled by at least one agent, which interaction is deficient in at least one aspect (*identifying if a desired word/phrase/sequence is not detected, Col. 8, Lines 58-67*);

Obtaining a voice record of at least a portion of the at least one interaction (*indexed voice interaction, Col. 11, Lines 1-62; Col. 13, Lines 7-19*);

Art Unit: 2626

Obtaining a further voice record of at least a portion of at least a further pre-recorded interaction or a plurality of pre-recorded interaction, wherein the plurality of pre-recorded interactions are stored in a library or data store containing exemplary interactions by the at least one agent made available for future reference in which the at least one aspect is not deficient (*script adherence that identified the presence of required statements, Col. 8, Lines 58-67; Col. 9, Lines 22-32, which are stored in a searchable audio format library for future reference, Col.10, Line 60- Col. 11, Line 61*); and

Transmitting data representing at least the portions of the voice record and the further voice record to the at least one agent (*transmitting indexed call data and associated evaluations to a customer service representative client workstation, Col. 3, Lines 11-44; and Col. 11, Lines 1-62*).

Scarano does not specifically disclose storing a video recording of an interaction, however, Katz recites a telemarketing application in which an agent is monitored using audio and video recordings (*Pages 8, 24, and 27-29*).

Scarano and Katz are analogous art because they are from a similar field of endeavor in customer service monitoring. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Scarano with the video monitoring taught by Katz in order to implement more effective agent monitoring (*Katz, Pages 15-16*).

With respect to **Claim 45**, Scarano further recites:

Identifying at least one QA-related parameter applicable to at least one interaction involving the at least one agent (*quality control speech monitoring, Col. 10, Lines 33-46*).

With respect to **Claim 46**, Scarano further discloses:

Art Unit: 2626

Analyzing the at least one interaction against the at least one QA-related parameter *(analyzing a voice interaction for the presence of required statements, Col. 9, Lines 22-32; and Col. 10, Lines 33-46).*

With respect to **Claim 47**, Scarano further discloses:

Identifying at least one interaction wherein the at least one agent does not comply with at least part of a pre-defined script governing the at least one interaction *(identifying required statements as a part of script adherence monitoring, Col. 9, Lines 22-32; and Col. 10, Lines 33-46).*

With respect to **Claim 48**, Scarano further discloses:

Identifying at least one interaction wherein the at least one agent fails to correctly enter data provided by a third party into a computer based system *(order validation, Col. 10, Lines 33-46).*

With respect to **Claim 49**, Scarano further discloses:

Identifying at least one interaction wherein the at least one agent provides an incorrect response to a question from a third party *(compliance assurance in a customer service environment, Col. 10, Lines 19-46).*

With respect to **Claim 50**, Scarano further discloses:

Recording at least a portion of at least one interaction processed by at least one agent physically located at a call center *(call center having customer service representative (CSR) workstations, Col. 3, Lines 11-44).*

With respect to **Claim 52**, Scarano further discloses:

Obtaining a further voice record includes obtaining at least a portion of a pre-recorded interaction (*stored call audio data, Col. 7, Lines 28-35; and Col. 12, Lines 6-18*).

With respect to **Claim 53**, Scarano further discloses:

Accessing at least one data store containing data representing at least respective portions of a plurality of pre-recorded interactions (*accessing recorded audio files on a server, Col. 11, Line 12- Col. 12, Line 18*).

With respect to **Claim 54**, Scarano further discloses:

Recording at least a portion of a further interaction occurring subsequently to the at least one interaction (*multiple indexed voice interaction portions, Col. 9, Lines 9-21*).

With respect to **Claim 56**, Scarano further shows:

Transmitting to the at least one agent at least one screen shot representation of a computer screen related to the at least one interaction (*Fig. 17*).

With respect to **Claim 57**, Scarano further discloses:

Transmitting to the at least one agent data representing at least a portion of a pre-defined script with which the at least one agent failed to comply (*script adherence analysis, Col. 10, Lines 33-46; and Fig. 17*).

With respect to **Claim 58**, Scarano further discloses:

Transmitting to the at least one agent data representing information enter incorrectly by the at least one agent into a computer-based system (*order validation and provided call details, Col. 10, Lines 33-46; and Fig. 17*).

With respect to **Claim 62**, Scarano further discloses:

Converting the voice record into a format suitable for transmission to at least one agent physically located in a call center (*audio signal conversion, Col. 11, Lines 12-38*).

Claim 64 contains subject matter similar to Claim 62, and thus, is rejected for the same reasons.

With respect to **Claim 67**, Scarano further discloses:

Accessing a data store adapted to correlate respective portions of a pre-defined script governing at least a portion of the at least one interaction to respective fields in the data store that store respective suggested voice records corresponding to the respective portions of the script (*indexed audio recordings/script adherence, Col. 9, Line 22- Col. 10, Line 46*).

With respect to **Claim 68**, Scarano in view of Katz discloses the agent evaluation method, as applied to Claim 44, wherein Scarano discloses that such a method can be implemented as a program on a computer, which would inherently require some type of memory for program storage (*Col. 8, Lines 58-67*).

14. **Claims 51, 63, and 65** are rejected under 35 U.S.C. 103(a) as being unpatentable over Scarano et al in view of Katz and further in view of Eilbacher et al (*U.S. Patent: 6,724,887*).

With respect to **Claim 51**, Scarano in view of Katz discloses the method/system for evaluating a voice interaction between an agent at a call center and a customer utilizing speech recognition, as applied to Claim 50. Although well known in the art, Scarano does not explicitly disclose that an agent may be located remotely from a call center, however, Eilbacher discloses such a location of a call agent (*Col. 6, Lines 42-49*).

Scarano, Katz, and Eilbacher are analogous art because they are from a similar field of endeavor in customer service analysis systems. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Scarano in view of Katz with the remote agent location taught by Eilbacher in order to expand the range and number of available call agents using a well-known remote agent configuration that is interchangeable with a in-house agent (*Eilbacher, Col. 6, Lines 42-49*).

Claims 63 and 65 contain subject matter similar to Claims 51 and 62, and thus, are rejected for the same reasons.

15. **Claims 55 and 66** are rejected under 35 U.S.C. 103(a) as being unpatentable over Scarano et al in view of Katz and further in view of Macleod Beck et al (*U.S. Patent: 6,910,072*).

With respect to **Claim 55**, Scarano in view of Katz discloses the method/system for evaluating a voice interaction between an agent and a customer utilizing speech recognition, as applied to Claim 44. Scarano in view of Katz does not specifically suggest a means for notifying an agent of performance via e-mail, however Macleod Beck discloses a means for emailing performance review data to an agent (*Col. 29, Lines 26-46*).

Scarano, Katz, and Macleod Beck are analogous art because they are from a similar field of endeavor in customer service analysis systems. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Scarano in view of Katz with the email means taught by Macleod Beck in order to provide a means for directly

Art Unit: 2626

providing an activity review that is only accessible by the intended agent (*Macleod Beck, Col. 29, Lines 26-46*).

Claim 66 contains subject matter similar to Claim 55 and 62, and thus is rejected for the same reasons.

16. **Claims 59-61** are rejected under 35 U.S.C. 103(a) as being unpatentable over Scarano et al in view of Katz and further in view of McIllwaine et al (*U.S. Patent: 6,324,282*).

With respect to **Claims 59-61**, Scarano in view of Katz discloses the method/system for evaluating a voice interaction between an agent and a customer utilizing speech recognition, as applied to Claim 44. Scarano in view of Katz does not specifically suggest providing remedial training documents/programs to an agent. McIllwaine, however, discloses a method/system for QA monitoring that directs agents to specific training materials and software based on monitoring results (*Col. 5, Line 52- Col. 6, Line 39; Col. 7, Lines 56-65; and Col. 10, Lines 4-14*).

Scarano, Katz, and McIllwaine are analogous art because they are from a similar field of endeavor in customer service analysis systems. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Scarano in view of Katz with the training material distribution means taught by McIllwaine in order to provide customized training to agents most in need of training (*McIllwaine, Col. 10, Lines 33-58*).

Conclusion

17. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Wozniak whose telephone number is (571) 272-7632. The examiner can normally be reached on M-Th, 7:30-5:00, F, 7:30-4, Off Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached at (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2626

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/James S. Wozniak/
Patent Examiner, Art Unit 2626